

Attorney Docket No. 06618-447001
Serial No. 09/574,448
Amendment dated August 2, 2004
Reply to Office Action dated
April 2, 2004

REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested.

Claims 25-54 stand rejected under 35 USC 102b as allegedly being anticipated by Sprenkels. In response, certain claims are amended herewith.

Specifically, claims 24, 40, and 53 have been amended herein. Claims 24 and 53 have been amended to recite that the backplane has a plurality of cavities formed therein. This limitation was already present in claim 40. Each of claims 24, 40 and 53 have been amended to recite that the cavities extend from the front face of the backplate to the rear face of the backplate, through the electrode. This distinguishes over the cited prior art, and produces advantages thereover.

As explained in the specification, the use of these holes may increase the upper cutoff frequency of the microphone by providing for communication between the electret and a backbone formed in the substrate. This may reduce the squeeze film damping effect. Sprenkels, on the other hand, does teach openings, but does not teach that these openings actually provide a communication path between one side of the back plate

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and the other. In fact, in Sprenkels the openings are used for acoustic purposes.

Taking the opening 8 as exemplary, after the opening is made, it is covered with a membrane foil; see for example column 8, lines 25-28. That membrane foil is then covered with a layer of conductive material such as copper, shown as 16 in figure 11, see column 8, lines 42-48. Therefore, it should be seen that whatever cavities are formed eg. 8 and 11 in 840, that cavity certainly does not extend through the electrode layer.

Therefore, the advantage discussed above, that is providing for communication between the air gap and the volume space, is not obtained, and therefore each of claims 24, 40, and 53 should be allowable for these reasons.

The dependent claims should be allowable for these reasons, as well as on their own merits. Specifically, claims 37 and 47 define that the plurality of cavities comprise more than 25,000 holes. This is quite different then the two holes that are disclosed by Sprenkels, and these claims should therefore be additionally allowable. The rejection states that Sprenkels discloses "about" 25,000 holes. While it is respectfully suggested that disclosure of two holes is certainly not "about 25,000" holes, these claims have been amended to recite at least 25,000 holes in order to obviate this rejection.

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In view of the above amendments and remarks, therefore, the claims should be in condition for allowance. A formal notice to that effect is respectfully solicited.

It is believed that all of the pending claims have been addressed in this paper. However, failure to address a specific rejection, issue or comment, does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above are not intended to be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.


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Respectfully submitted,

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